IN THE CLAIMS

1. (previously presented) Transceiver circuitry for ultrasound transducer elements, the transceiver circuitry comprising:

a transmit section comprising:

a transmit section input;

a transmit section output; and

receive signal blocking circuitry coupled between the transmit section input and the transmit section output; and

a receive section comprising:

a receive section input;

a receive section output and

transmit signal blocking circuitry coupled between the receive section input and the receive section output including a coupling capacitor adapted to decouple the receive section during operation of the transmit section.

2. (original) The transceiver circuitry of claim 1, where the transmit section output is coupled to the receive section input.

3. (original) The transceiver circuit of claim 1, where the transmit section input is coupled to the receive section output.

4. (original) The transceiver circuitry of claim 1, where at least one of the transmit and receive signal blocking circuitry comprises clamping diodes.

5. (original) The transceiver circuitry of claim 1, where the receive signal blocking circuitry comprises clamping diodes coupled to the transmit section output and back-to-back diodes coupled to the transmit section input.

6. (currently amended) The transceiver circuitry of claim 1, further comprising ~~back-to-back~~ back-to-back diodes coupled between multiple transducer elements of the transducer elements, said back-to-back diodes forming a short circuit between said multiple transducer elements during transmit.

7. (currently amended) The transceiver circuitry of claim 1, further comprising back-to-back diodes coupled between multiple transducer elements, said back-to-back diodes forming an open circuit between said multiple transducer elements of the ultrasound transducer elements during reception.

8. (original) The transceiver circuitry of claim 1, where the transmit signal blocking circuitry comprises clamping diodes coupled to the receive section input and clamping diodes coupled to the receive section output.

9. (original) The transceiver circuitry of claim 1, further comprising a voltage step up circuit coupled between the transmit section input and the transmit section output.

10. (previously presented) An ultrasound probe comprising:

a transducer array comprising array transducer elements; and

transceiver circuitry comprising:

a transmit section output coupled through receive signal blocking circuitry and a coupling capacitor to transmit transducer elements comprising a transmit aperture;

a receive section input coupled to a multiplexed transducer element selected from the transmit transducer elements and adapted to be decoupled during operation of the transmit section,

wherein the transmit section output drives the multiplexed transducer element during ultrasound beam transmission and where the receive section input receives a reception signal from the multiplexed transducer element during ultrasound beam reception.

11. (original) The ultrasound probe of claim 10, where the transceiver circuitry further comprises a transmit section input coupled to a receive section output.

12. (original) The ultrasound probe of claim 10, where the receive signal blocking circuitry comprises low level signal blocking circuitry.

13. (original) The ultrasound probe of claim 10, where at least one of the transmit and receive signal blocking circuitry comprises clamping diodes.

14. (original) The ultrasound probe of claim 10, further comprising transmit signal blocking circuitry coupled to the receive section output.

15. (currently amended) The ultrasound probe of claim 10, further comprising back-to-back diodes coupled between multiple transducer elements, said back-to-back diodes forming a short circuit between [[said]] multiple transducer elements of said array transducer elements during transmit.

16. (currently amended) The ultrasound probe of claim 10, further comprising back-to-back diodes coupled between multiple transducer elements, said back-to-back diodes forming an open circuit between [[said]] multiple transducer elements of said array of transducer elements during reception.

17. (original) The ultrasound probe of claim 10, where the transmit aperture comprises a rectangular patch of transmit transducer elements.

18. (original) The ultrasound probe of claim 10, where the rectangular patch is a 2x2 patch.

19. (original) The ultrasound probe of claim 10, where the multiplexed transducer element is included in a triangular receive aperture comprised of selected array transducer elements.

20. (currently amended) The ultrasound probe of claim 10, where [[the]] a receive aperture comprises a first section of five transducer elements of said array of transducer elements, a second section of four transducer elements of said array of transducer elements, a third section of three transducer elements of said array of transducer elements, a fourth section of two transducer elements of said array of transducer elements, and a fifth section of one transducer element of said array of transducer elements.

21. (previously presented) A method for transmitting and receiving signals through ultrasound transducer elements, the method comprising the steps of:

coupling a transmit pulse through a transmit section input, a transmit section output, and receive signal blocking circuitry coupled between the transmit section input and the transmit section output; and

coupling a receive signal through a receive section input, a receive section output, and transmit signal blocking circuitry coupled between the receive section input and the receive section output, the transmit signal blocking circuitry including a coupling capacitor adapted to decouple the receive section input during operation of the transmit section input and transmit section output.

22. (original) The method of claim 21, wherein the transmit section input is coupled to the receive section output.

23. (original) The method of claim 21, where the transmit section output is coupled to the receive section input.

24. (original) The method of claim 21, where the receive signal blocking circuitry comprises low level signal blocking circuitry.

25. (previously presented) The method of claim 21, where at least one of the transmit and receive signal blocking circuitry comprises a clamping diode and an impedance element.

26. (original) The method of claim 21, where the receive signal blocking circuitry comprises back-to-back diodes coupled to the transmit section output and clamping diodes coupled to the transmit section input.

27. (previously presented) The method of claim 21, where the transmit signal blocking circuitry comprises clamping diodes coupled to the receive section output and back-to-back diodes coupled to the receive section input.